

Practitioner's Docket No. MPI00-252P1RM**IN THE CLAIMS:**

Kindly cancel claims 1-31 and add new claims 32-61. This listing of claims will replace all prior versions, and listings, of claims in the application:

STATUS OF THE CLAIMS:

1-31 (Presently Canceled)

32. (New): An isolated nucleic acid molecule selected from the group consisting of:

a) a nucleic acid molecule comprising a nucleotide sequence which is at least 95% identical to the entire length of the nucleotide sequence of SEQ ID NO:1, or a full complement thereof;

b) a nucleic acid molecule comprising a nucleotide sequence which is at least 95% identical to the entire length of the nucleotide sequence of SEQ ID NO:3, or a full complement thereof; and

c) a nucleic acid molecule which encodes a polypeptide comprising an amino acid sequence at least 95% identical to the entire length of the amino acid sequence of SEQ ID NO:2;

wherein the nucleic acid molecule encodes a polypeptide having potassium channel activity.

33. (New): An isolated nucleic acid molecule selected from the group consisting of:

a) a nucleic acid molecule comprising the nucleic acid sequence of SEQ ID NO:1 or SEQ ID NO:3, or a full complement thereof; and

b) a nucleic acid molecule which encodes a polypeptide comprising the amino acid sequence of SEQ ID NO:2, or a full complement thereof.

34. (New): An isolated nucleic acid molecule selected from the group consisting of:

a) a nucleic acid molecule consisting of the nucleic acid sequence of SEQ ID NO:1 or SEQ ID NO:3, or a full complement thereof; and

b) a nucleic acid molecule which encodes a polypeptide consisting of the amino acid sequence of SEQ ID NO:2, or a full complement thereof.

35. (New): The nucleic acid molecule of claim 32, further comprising vector nucleic acid sequences.

36. (New): The nucleic acid molecule of claim 33, further comprising vector nucleic acid sequences.

37. (New): The nucleic acid molecule of claim 34, further comprising vector nucleic acid sequences.

Practitioner's Docket No. MPI00-252P1RM

38. (New): The nucleic acid molecule of claim 32, further comprising nucleic acid sequences encoding a heterologous polypeptide.

39. (New): The nucleic acid molecule of claim 33, further comprising nucleic acid sequences encoding a heterologous polypeptide.

40. (New): The nucleic acid molecule of claim 34, further comprising nucleic acid sequences encoding a heterologous polypeptide.

41. (New): The nucleic acid molecule of claim 38, further comprising vector nucleic acid sequences.

42. (New): The nucleic acid molecule of claim 39, further comprising vector nucleic acid sequences.

43. (New): The nucleic acid molecule of claim 40, further comprising vector nucleic acid sequences.

44. (New): An isolated host cell which contains the nucleic acid molecule of claim 35.

45. (New): The host cell of claim 44 which is a mammalian host cell.

46. (New): An isolated host cell which contains the nucleic acid molecule of claim 36.

47. (New): The host cell of claim 46 which is a mammalian host cell.

48. (New): An isolated host cell which contains the nucleic acid molecule of claim 37.

49. (New): The host cell of claim 48 which is a mammalian host cell.

50. (New): An isolated host cell which contains the nucleic acid molecule of claim 41.

51. (New): The host cell of claim 50 which is a mammalian host cell.

52. (New): An isolated host cell which contains the nucleic acid molecule of claim 42.

53. (New) The host cell of claim 52 which is a mammalian host cell.

Practitioner's Docket No. MPI00-252P1RM

54. (New): An isolated host cell which contains the nucleic acid molecule of claim 43.

55. (New): The host cell of claim 54 which is a mammalian host cell.

56. (New): A method for producing a polypeptide, comprising culturing the host cell of claim 44 under conditions in which the polypeptide encoded by the nucleic acid molecule is expressed, thereby producing a polypeptide.

57. (New): A method for producing a polypeptide, comprising culturing the host cell of claim 46 under conditions in which the polypeptide encoded by the nucleic acid molecule is expressed, thereby producing a polypeptide.

58. (New): A method for producing a polypeptide, comprising culturing the host cell of claim 48 under conditions in which the polypeptide encoded by the nucleic acid molecule is expressed, thereby producing a polypeptide.

59. (New): A method for producing a polypeptide, comprising culturing the host cell of claim 50 under conditions in which the polypeptide encoded by the nucleic acid molecule is expressed, thereby producing a polypeptide.

60. (New): A method for producing a polypeptide, comprising culturing the host cell of claim 52 under conditions in which the polypeptide encoded by the nucleic acid molecule is expressed, thereby producing a polypeptide.

61. (New): A method for producing a polypeptide, comprising culturing the host cell of claim 54 under conditions in which the polypeptide encoded by the nucleic acid molecule is expressed, thereby producing a polypeptide.